

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (amended) A compression plate anastomosis apparatus for anastomosing a ~~first an end of a graft vessel and to a side of a second~~ receiving vessel together, comprising:

a first compression plate having a first compression plate opening;

wherein the first compression plate opening has a perimeter defined by first holding means for holding a portion of the ~~first~~ receiving vessel that defines a ~~first~~ receiving vessel opening in the side of the receiving vessel,

wherein the first compression plate is shaped to enable the ~~first~~ receiving vessel portion to extend through the first compression plate opening in a manner such that the ~~first~~ receiving vessel opening conforms to the perimeter of the first compression plate opening, and

wherein the first holding means ~~is adapted to hold~~ extends from said first compression plate with a length that is sufficiently short to permit the first receiving vessel portion in a manner such that to extend through the first compression plate opening with a length sufficient for the first receiving vessel portion is at least partially to be everted over the first holding means at least partially around the first compression plate

opening; and

a second compression plate having a second compression plate opening;

wherein the second compression plate opening is defined by second holding means for holding a portion of a ~~second~~ graft vessel that defines a ~~second~~ graft vessel opening,

wherein the first compression plate and the second compression plate have means for locking the compression plates together, ~~and~~

wherein the first compression plate, the second compression plate and the locking means are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the receiving and graft vessel portions held directly between the first and second holding means.

wherein the first holding means is shaped to hold the first receiving vessel portion in a configuration such that when the first receiving vessel portion and the ~~second~~ graft vessel portion are anastomosed together there is an uneven distribution of force against the first receiving vessel portion around the first receiving vessel opening caused by the shape of the first holding means and due to the inability of the second holding means to fully extend into any spaces of the first holding means, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving

vessel.

2. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the first and second compression plates are snap-fit compression plates that are configured such that the locking means snap into place when the compression plates are brought together.

3. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the locking means comprises a plurality of locking arms extending from an outer periphery of a ring of the first compression plate and a locking extension of the second compression plate.

4. (amended) A compression plate anastomosis apparatus as recited in claim 3, wherein the locking arms of the first compression plate have a length that enables the arms to lock around the locking extension in a manner such that the portion defining the ~~first~~ receiving vessel opening and the portion defining the ~~second~~ graft vessel opening are held together without being damaged in a manner that causes the anastomosis to fail.

5. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the first holding means comprises a plurality of holding tabs extending from an inner periphery of a ring of the first compression plate.

6. (amended) A compression plate anastomosis apparatus as recited in claim 1, wherein the second holding means is a holding surface located around the second compression plate opening with a configuration such that the portion of the ~~second~~ graft vessel defining the ~~second~~ graft vessel opening may be everted onto the holding surface.

7. (original) A compression plate anastomosis apparatus as recited in claim 6, wherein the holding surface extends radially downward at an angle from the second compression plate opening.

8. (withdrawn) A compression plate anastomosis apparatus as recited in claim 1, wherein the locking means comprises means for guiding the movement of one compression plate relative to the other.

9. (amended) A compression plate anastomosis apparatus as recited in claim 8, wherein the guiding means extend from one of compression plate and the other compression plate has a plurality of holes through which the guiding means are inserted such that the compression plate with the holes is glidably mounted on the guiding means, and wherein the holes are sized to provide frictional resistance to movement of the glidably mounted compression plate with the holes on the guiding means.

10. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the first holding means comprises a first plurality of holding tabs and wherein the second holding means comprises a second plurality of holding tabs.

11. (previously presented) A compression plate anastomosis apparatus as recited in claim 1, wherein said first and second compression plates each have an inner periphery at their respective openings, wherein said first and second holding means are located on the inner peripheries of the respective first and second compression plates.

12. (amended) A compression plate anastomosis apparatus as recited in claim 1, wherein said first holding means are in mating configuration with respect to said second holding means once the second graft vessel is brought into contact with the ~~first~~ receiving vessel for anastomosis.

13. (amended) A compression plate anastomosis apparatus as recited in claim 1, wherein said second holding means is adapted configured to hold the portion of the ~~second~~ graft vessel that defines the ~~second~~ graft vessel opening in a manner such that the portion defining the ~~second~~ graft vessel opening is at least partially everted.

14. (withdrawn) A compression plate anastomosis apparatus as recited in claim 8, wherein said guiding means extend from the first compression plate with a perpendicular orientation.

15. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the locking means comprises at least one locking arm extending from an outer periphery of a ring of one of the compression plates and a locking extension on the other compression plate.

16. (amended) A compression plate anastomosis apparatus as recited in claim 1, wherein the first compression plate and the second compression plate are ~~adapted~~ configured for use with vessel openings that are generally circular.

17. (withdrawn) A compression plate anastomosis apparatus as recited in claim 15, wherein the first compression plate and the second compression plate are ~~adapted~~ configured for use with the vessel openings that are noncircular.

18. (amended) A compression plate anastomosis apparatus for anastomosing ~~vessels~~ an end of a graft vessel to a side of a receiving vessel, comprising:

a first compression plate comprising a ring and a plurality of holding tabs extending from the ring;

wherein the plurality of holding tabs extending from the ring of said first compression plate define a first compression plate opening,

wherein the ring and the holding tabs are ~~adapted~~ configured to enable the portion of the ~~first~~ receiving vessel defining ~~the first~~ a receiving

vessel opening in the side of the receiving vessel to extend through the first compression plate opening in a manner such that the ~~first~~ receiving vessel opening conforms to the perimetrical shape of the first compression plate opening, and

wherein the holding tabs ~~are adapted to hold~~ extend from said first compression plate with a length that is sufficiently short to permit the first receiving vessel portion in a manner such that to extend through the first compression plate opening with a length sufficient for the first receiving vessel portion to be is everted over the first plurality of holding tabs at least partially everted around the holding tabs first compression plate opening;

and

a second compression plate having a second compression plate opening;

wherein the second compression plate opening is defined by a holding surface located around the second compression plate opening with a configuration such that the portion of the ~~second graft~~ vessel defining the ~~second~~ graft vessel opening may be everted onto the holding surface;

wherein the first compression plate and the second compression plate have mated locking components to lock the compression plates together without requiring penetration through

the ~~first~~ receiving vessel by the mated locking components; and

wherein the mated locking components are separate relative to the holding tabs and are different structures relative to the holding tabs;

wherein the first compression plate, the second compression plate and the mated locking components are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the graft and receiving vessel portions held directly between the holding tabs and the holding surface, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving vessel.

19. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein the first and second compression plates are snap-fit compression plates that are configured such that the locking components snap into place when the compression plates are brought together.

20. (previously presented) A compression plate anastomosis apparatus as recited in claim 18, wherein one of the mated locking components comprises a plurality of locking arms extending from an outer periphery of the ring of the first compression

plates and the other mated locking component is a locking extension extending from the second compression plate.

21. (amended) A compression plate anastomosis apparatus as recited in claim 20, wherein the locking arms have a length that enables the arms to lock around the locking extension in a manner such that the portion defining the ~~first~~ receiving vessel opening and the portion defining the ~~second~~ graft vessel opening are held together without being damaged in a manner that causes the anastomosis to fail.

22. (previously presented) A compression plate anastomosis apparatus as recited in claim 18, wherein the plurality of holding tabs extend from an inner periphery of the ring of the first compression plate.

23. (previously presented) A compression plate anastomosis apparatus as recited in claim 18, wherein each holding tab terminates at a rounded tip.

24. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein said plurality of holding tabs extend perpendicularly from the ring of the first compression plate.

25. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein said plurality of holding tabs curve inward from an exterior side of the

ring of the first compression plate such that distal ends of the holding tabs are perpendicularly oriented relative to the exterior side of the ring of the first compression plate.

26. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein the holding surface extends radially downward at an angle from the second compression plate opening.

27. (amended) A compression plate anastomosis apparatus as recited in claim 18, wherein the first compression plate and the second compression plate are ~~adapted~~ configured for use with vessel openings that are generally circular.

28. (withdrawn) A compression plate anastomosis apparatus as recited in claim 18, wherein the first compression plate and the second compression plate are ~~adapted~~ configured for use with vessel openings that are noncircular.

29. (amended) A ~~snap-fit~~ compression plate anastomosis apparatus for anastomosing vessels an end of a graft vessel to a side of a receiving vessel, comprising:

a first compression plate comprising a ring and a plurality of holding tabs extending from the ring;

wherein the plurality of holding tabs extending from the ring of said

first compression plate define a first compression opening,

wherein the ring and the holding tabs are adapted ~~configured~~ configured to enable the portion of the ~~first receiving~~ vessel defining the ~~first a receiving~~ vessel opening in the side of the receiving vessel to extend through the first compression plate opening in a manner such that the ~~first receiving~~ vessel opening conforms to the perimetrical shape of the first compression plate opening, and

wherein the holding tabs ~~are adapted to hold~~ extend from said first compression plate with a length that is sufficiently short to permit the first receiving vessel portion in a manner such that to extend through the first compression plate opening with a length sufficient for the first receiving vessel portion to be everted over the first plurality of holding tabs at least partially ~~everted~~ around the holding tabs first compression plate opening; and

a second compression plate having a second compression plate opening;

wherein the second compression plate opening is defined by a holding surface located around the second compression plate opening with a configuration such that the portion of the ~~second graft~~ vessel defining the ~~second graft~~ vessel opening may be everted onto the holding surface;

wherein the first compression plate has an outer periphery from which a plurality of locking arms extend, wherein the locking arms are

~~adapted~~ configured to lock with a locking extension projecting from the second compression plate that enables the compression plates to lock together;

wherein the first compression plate, the second compression plate and the mated locking components are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the graft and receiving vessel portions held directly between the holding tabs and the holding surface, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving vessel.

30. (amended) A compression plate anastomosis apparatus as recited in claim 29, wherein the locking arms have a length that enables the arms to lock around the locking extension in a manner such that the portion defining the first receiving vessel opening and the portion defining the ~~second~~ graft vessel opening are held together without being damaged in a manner that causes the anastomosis to fail.

31. (previously presented) A compression plate anastomosis apparatus as recited in claim 29, wherein the plurality of holding tabs extend from an inner periphery of the ring of the first compression plate.

32. (previously presented) A compression plate anastomosis apparatus as recited in claim 29, wherein each holding tab terminates at a rounded tip.

33. (original) A compression plate anastomosis apparatus as recited in claim 29, wherein said plurality of holding tabs extend perpendicularly from the ring of the first compression plate.

34. (original) A compression plate anastomosis apparatus as recited in claim 29, wherein said plurality of holding tabs curve inward from an exterior side of the ring of the first compression plate such that distal ends of the holding tabs are perpendicularly oriented relative to the exterior side of the ring of the first compression plate.

35. (original) A compression plate anastomosis apparatus as recited in claim 29, wherein the holding surface extends radially downward at an angle from the second compression plate opening.

36. (amended) A compression plate anastomosis apparatus as recited in claim 29, wherein the first compression plate and the second compression plate are adapted configured for use with vessel openings that are generally circular.

37. (withdrawn) A compression plate anastomosis apparatus as recited in

claim 29, wherein the first compression plate and the second compression plate are adapted configured for use with the vessel openings that are noncircular.

38. (amended) A compression plate anastomosis apparatus for anastomosing an end of a first graft vessel and to a second side of receiving vessel together, comprising:

a first compression plate comprising a ring and a plurality of holding tabs extending from the ring;

wherein the plurality of holding tabs define a first compression opening having a perimeter,

wherein the plurality of holding tabs are shaped to enable a portion of a ~~first~~ receiving vessel defining a ~~first~~ receiving vessel opening in the side of the receiving vessel to extend through the first compression plate opening in a manner such that the ~~first~~ receiving vessel opening conforms to the perimeter of the first compression plate opening as the ~~first~~ receiving vessel portion is held by the plurality of holding tabs, and

wherein the holding tabs ~~are adapted to hold~~ extend from said first compression plate with a length that is sufficiently short to permit the first receiving vessel portion by eversion over the holding tabs to extend through the first compression plate opening with a length sufficient for the receiving vessel portion to be everted over the first plurality of holding tabs at least partially around the perimeter of the first compression plate

opening; and

a second compression plate comprising a holding surface around a second compression plate opening;

wherein the first compression plate and the second compression plate have mated locking components to lock the compression plates together;

wherein the holding tabs of the first compression plate are shaped to hold the first receiving vessel portion in a configuration such that when the first receiving vessel portion and the second graft vessel portion are anastomosed together there is an uneven distribution of force against the first receiving vessel portion caused by the shape of the holding tabs and due to the inability of the holding surface to fully extend into any spaces of the first holding means; and

wherein the mated locking components are separate relative to the holding tabs and are different structures relative to the holding tabs;

wherein the first compression plate, the second compression plate and the mated locking components are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the graft and receiving vessel portions held directly between the holding tabs and the holding surface, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving

vessel.

39. (amended) A compression plate anastomosis apparatus for anastomosing an end of a first graft vessel and to a second side of receiving vessel together, comprising:

a first compression plate comprising a ring and a plurality of holding tabs extending from the ring;

wherein the plurality of holding tabs extending from the ring of the first compression plate define a first compression opening having a perimeter,

wherein the plurality of holding tabs extending from the ring of the first compression plate are shaped to enable a portion of a first receiving vessel defining a first receiving vessel opening in the side of the receiving vessel to extend through the first compression plate opening in a manner such that the first receiving vessel opening conforms to the perimeter of the first compression plate opening as the first receiving vessel portion is held by the plurality of holding tabs extending from the ring of the first compression plate, and

wherein the plurality of holding tabs extending from the ring of the first compression plate ~~are adapted to hold~~ with a length that is sufficiently short to permit the first receiving vessel portion by eversion over the holding tabs to extend through the first compression plate opening with a

length sufficient for the receiving vessel portion to be everted over the first plurality of holding tabs at least partially around ~~the perimeter of~~ the first compression plate opening; and

a second compression plate comprising a ring and a plurality of holding tabs extending from the ring,

wherein the first compression plate and the second compression plate have mated locking components to lock the compression plates together;

wherein the holding tabs of the first compression plate are positioned relative to the holding tabs of the second compression plate such that when the ~~first~~ receiving vessel portion and the ~~second~~ graft vessel portion are anastomosed together there is an uneven distribution of force against the ~~first~~ receiving vessel portion and the ~~second~~ graft vessel portion caused by the shape of the holding tabs of each compression plate, and the relative position of the holding tabs of the first compression plate to the holding tabs of the second compression plate, and due to the inability of the holding tabs of each compression plate to fully extend into any spaces between the holding tabs of the opposite plate; and

wherein the mated locking components are separate relative to the holding tabs and are different structures relative to the holding tabs;

wherein the first compression plate, the second compression plate and the mated locking components are configured to cooperate together

to anastomose the end of the graft vessel to the side of the receiving vessel with the graft and receiving vessel portions held directly between the holding tabs of the first compression plate and the holding tabs of the second compression plate, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving vessel.

40. (amended) A compression plate anastomosis apparatus for anastomosing an end of a first graft vessel and to a second side of receiving vessel together, comprising:

a first compression plate comprising first holding means for holding a portion of a ~~first~~ receiving vessel that defines a ~~first~~ receiving vessel opening in the side of the receiving vessel,

wherein the first holding means defines a first compression plate opening having a perimeter;

wherein the first holding means is shaped to enable the first receiving vessel portion to extend through the first compression plate opening in a manner such that the ~~first~~ receiving vessel opening conforms to the perimeter of the first compression plate opening as the ~~first~~ receiving vessel portion is held by the first holding means, and

wherein the first holding means ~~is adapted to hold~~ extends from

said first compression plate with a length that is sufficiently short to permit the first receiving vessel portion to extend through the first compression plate opening with a length sufficient for the first receiving vessel portion to be everted over by eversion around the first holding means at least partially around the perimeter of the first compression plate opening and not by reliance on penetration of the first receiving vessel portion by the first holding means; and

a second compression plate comprising second holding means for holding a portion of a ~~second~~ graft vessel that defines a ~~second~~ graft vessel opening,

~~wherein the first holding means and the second holding means are adapted to cooperate together in holding the first vessel between the first holding means and the second means,~~

wherein the first compression plate and the second compression plate have means for locking the compression plates together, and

wherein the first compression plate, the second compression plate and the locking means are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the receiving and graft vessel portions held directly between the first and second holding means, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving vessel and the locking means enables the first receiving vessel to

continue being held between the first holding means and the second holding means after anastomosis of the first receiving vessel and the ~~second~~ graft vessel.

41. (amended) A compression plate anastomosis apparatus as recited in claim 40, wherein the locking means is ~~adapted~~ configured to lock the first compression plate and the second compression plate together without penetrating through the first receiving vessel.

42. (amended) A compression plate anastomosis apparatus as recited in claim 40, wherein the first holding means are configured to enable the eversion of the first receiving vessel portion to expose the interior surface of the first receiving vessel portion to the ~~second~~ graft vessel portion.

43. (amended) A compression plate anastomosis apparatus for anastomosing an end of a first graft vessel and to a second side of receiving vessel together, comprising:

a first compression plate comprising a ring and a plurality of holding tabs extending from the ring,

wherein the plurality of holding tabs define a first compression opening having a perimeter,

wherein the plurality of holding tabs are shaped to enable a portion

of a ~~first~~ receiving vessel defining a ~~first~~ receiving vessel opening in the side of the receiving vessel to extend through the first compression plate opening in a manner such that the ~~first~~ receiving vessel opening conforms to the perimeter of the first compression plate opening as the ~~first~~ receiving vessel portion is held by the plurality of holding tabs, and

wherein the plurality of holding tabs ~~are adapted to hold~~ extend from the first compression plate with a length that is sufficiently short to permit the first receiving vessel portion by eversion over the holding tabs to extend through the first compression plate opening with a length sufficient for the receiving vessel portion to be everted over the first plurality of holding tabs at least partially around the ~~perimeter of the first~~ compression plate opening and not by reliance on penetration of the ~~first~~ receiving vessel portion by the holding tabs; and

a second compression plate having a second compression plate opening defined by a plurality of holding tabs,

wherein the first compression plate and the second compression plate have mated locking components to lock the compression plates together,

wherein the first compression plate, the second compression plate and the mated locking components are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the graft and receiving vessel portions held directly between

the holding tabs of the first compression plate and the holding tabs of the second compression plate, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving vessel.

44. (amended) A compression plate anastomosis apparatus as recited in claim 43, wherein the locking components are adapted configured to lock the first compression plate and the second compression plate together without penetrating through the first receiving vessel.

45. (amended) A compression plate anastomosis apparatus as recited in claim 43, wherein the holding tabs are configured to enable the eversion of the first receiving vessel portion to expose the interior surface of the first receiving vessel portion to the second compression plate.

46-57 (cancelled)

58. (new) A compression plate anastomosis apparatus as recited in claim 43, wherein said plurality of holding tabs curve inward from an exterior side of the ring of the first compression plate such that distal ends of the holding tabs are perpendicularly oriented relative to the exterior side of the ring of the first compression plate.

59. (new) A compression plate anastomosis apparatus for anastomosing an end of a graft vessel to a side of receiving vessel, comprising:

a first compression plate comprising a ring and a plurality of holding tabs extending from the ring,

wherein the plurality of holding tabs define a first compression opening having a perimeter,

wherein the plurality of holding tabs are shaped to enable a portion of a receiving vessel defining a receiving vessel opening in the side of the receiving vessel to extend through the first compression plate opening in a manner such that the receiving vessel opening conforms to the perimeter of the first compression plate opening as the receiving vessel portion is held by the plurality of holding tabs, and

wherein the plurality of holding tabs extend from the first compression plate with a length that is sufficiently short to permit the receiving vessel portion to extend through the first compression plate opening with a length sufficient for the receiving vessel portion to be everted over the first plurality of holding tabs at least partially around the first compression plate opening and not by reliance on penetration of the receiving vessel portion by the holding tabs;

a second compression plate having a second compression plate opening defined by a holding surface,

wherein the first compression plate and the second compression plate have mated locking components to lock the compression plates together,

wherein the first compression plate, the second compression plate and the mated locking components are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the graft and receiving vessel portions held directly between the holding tabs of the first compression plate and the holding surface of the second compression plate, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving vessel.

60. (new) A compression plate anastomosis apparatus as recited in claim 59, wherein the holding surface extends radially downward at an angle from the second compression plate opening.

61. (new) A compression plate anastomosis apparatus as recited in claim 40, wherein the first and second compression plates are snap-fit compression plates that are configured such that the locking means snap into place when the compression plates are brought together.

62. (new) A compression plate anastomosis apparatus for anastomosing an end of a graft vessel to a side of receiving vessel, comprising:

a first compression plate comprising a ring and a plurality of holding tabs extending from the ring,

wherein the plurality of holding tabs define a first compression opening having a perimeter,

wherein the plurality of holding tabs are shaped to enable a portion of a receiving vessel defining a receiving vessel opening in the side of the receiving vessel to extend through the first compression plate opening in a manner such that the receiving vessel opening conforms to the perimeter of the first compression plate opening as the receiving vessel portion is held by the plurality of holding tabs, and

wherein the plurality of holding tabs extend from the first compression plate with a length that is sufficiently short to permit the receiving vessel portion to extend through the first compression plate opening with a length sufficient for the receiving vessel portion to be everted over the first plurality of holding tabs at least partially around the first compression plate opening and not by reliance on penetration of the receiving vessel portion by the holding tabs;

a second compression plate having a second compression plate opening defined by a plurality of holding tabs,

wherein the first compression plate and the second compression

plate have mated locking components to lock the compression plates together,

wherein the first compression plate, the second compression plate and the mated locking components are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the graft and receiving vessel portions held directly between the holding tabs of the first compression plate and the holding tabs of the second compression plate,

wherein the first and second compression plates are snap-fit compression plates that are configured such that the mated locking components snap into place when the compression plates are brought together, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving vessel.

63. (new) A compression plate anastomosis apparatus as recited in claim 62, wherein said plurality of holding tabs curve inward from an exterior side of the ring of the first compression plate such that distal ends of the holding tabs are perpendicularly oriented relative to the exterior side of the ring of the first compression plate.

64. (new) A compression plate anastomosis apparatus for anastomosing an end of a graft vessel to a side of receiving vessel, comprising:

a first compression plate comprising a ring and a plurality of holding tabs extending from the ring,

wherein the plurality of holding tabs define a first compression opening having a perimeter,

wherein the plurality of holding tabs are shaped to enable a portion of a receiving vessel defining a receiving vessel opening in the side of the receiving vessel to extend through the first compression plate opening in a manner such that the receiving vessel opening conforms to the perimeter of the first compression plate opening as the receiving vessel portion is held by the plurality of holding tabs, and

wherein the plurality of holding tabs extend from the first compression plate with a length that is sufficiently short to permit the receiving vessel portion to extend through the first compression plate opening with a length sufficient for the receiving vessel portion to be everted over the first plurality of holding tabs at least partially around the first compression plate opening and not by reliance on penetration of the receiving vessel portion by the holding tabs;

a second compression plate having a second compression plate opening defined by a holding surface,

wherein the first compression plate and the second compression

plate have mated locking components to lock the compression plates together,

wherein the first compression plate, the second compression plate and the mated locking components are configured to cooperate together to anastomose the end of the graft vessel to the side of the receiving vessel with the graft and receiving vessel portions held directly between the holding tabs of the first compression plate and the holding surface of the second compression plate,

wherein the first and second compression plates are snap-fit compression plates that are configured such that the mated locking components snap into place when the compression plates are brought together, and

wherein the apparatus is configured to remain in one's body after the end of the graft vessel is anastomosed to the side of the receiving vessel.

65. (new) A compression plate anastomosis apparatus as recited in claim 64, wherein the holding surface extends radially downward at an angle from the second compression plate opening.